

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference CLC/HJL/8412INT	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/GB2004/001540	International filing date (day/month/year) 08.04.2004	Priority date (day/month/year) 12.04.2003	
International Patent Classification (IPC) or national classification and IPC G09F3/00			
Applicant BASTIONE LIMITED et al.			

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. (sent to the applicant and to the International Bureau) a total of 4 sheets, as follows:

sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)), containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

Box No. I Basis of the opinion

Box No. II Priority

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Box No. IV Lack of unity of invention

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Box No. VI Certain documents cited

Box No. VII Certain defects in the international application

Box No. VIII Certain observations on the international application

Date of submission of the demand 02.11.2004	Date of completion of this report 03.06.2005
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Pavlov, V Telephone No. +49 89 2399-6067



INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/GB2004/001540

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
 - international search (under Rules 12.3 and 23.1(b))
 - publication of the international application (under Rule 12.4)
 - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

Description, Pages

1-11 as originally filed

Claims, Numbers

1-36 filed with telefax on 08.04.2005

Drawings, Sheets

1/4-4/4 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. The amendments have resulted in the cancellation of:

- the description, pages
- the claims, Nos.
- the drawings, sheets/figs
- the sequence listing (*specify*):
- any table(s) related to sequence listing (*specify*):

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- the description, pages
- the claims, Nos.
- the drawings, sheets/figs
- the sequence listing (*specify*):
- any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2004/001540

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-36
	No: Claims	
Inventive step (IS)	Yes: Claims	1-36
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-36
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/GB2004/001540

Re Item V

1. Reference is made to the following documents:

D1: EP-A-0 398 635 (MINNESOTA MINING & MFG) 22 November 1990 (1990-11-22)
D2: US-B1-6 214 443 (LEE KANG ET AL) 10 April 2001 (2001-04-10)
D3: US-A-5 127 675 (MOSS JAMES W) 7 July 1992 (1992-07-07)

2. **Claim 1:** None of the documents cited in the International Search Report discloses a security label with features as recited in Claim 1.

Prior art: Document **D1** discloses a label comprising a transparent face stock, a release coating forming an indicia attached to the face stock, a primer covering the face stock and release coating, a frangible metal layer covering the primer and an adhesive covering the metal layer. Document **D2** describes a label comprising a clear protective layer; a thin layer of clear UV cured resin cast partly onto the protective layer following a designed pattern; another layer of UV cured resin bearing a cast holographic image. Document **D3** shows a marking label comprising a sheet of material having one surface coated with an adhesive material, and closed peripheral cuts formed through the sheet.

The problem to be solved: to devise a label which provides clear evidence of tampering.

The solution to this problem consist in that the label comprises a carrier, a first printed layer of a non-affixing UV rotary letter press ink which defines patterned regions which are devoid of material, a second pigmented layer of an affixing material wherein regions of the second layer adhere to the carrier via the patterned regions of the first layer, and an adhesive layer to adhere the label to a support. When the label is removed from the support, the patterned affixing portions of the second layer remain adhered to the support.

The advantage is in that the use of pigmented coatings and rotary letter press ink allows a coloured printed pattern in a form of a word, logo or picture to be applied using an ordinary printing process which provides both a simple method of protecting information and a clear evidence of tampering.

The claimed device **involves an inventive step** since none of the cited prior art documents discloses or fairly suggests to provide a label structure with a first printed layer of a non-affixing UV rotary letter press ink with patterned regions which are devoid of material and a second pigmented layer of an affixing material wherein regions of the second layer adhere to the carrier via the patterned regions of the first layer.

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.
PCT/GB2004/001540

Claim 1 meets therefore the requirements of Article 33(2), 33(3) PCT.

3. Claims 2-36 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Re Item VII

1. To meet the requirements of Rule 6.3(b) PCT, the independent claims should be properly cast in the two part form, with all those features which in combination are part of the prior art being placed in the preamble.

2. Reference signs in parentheses should be inserted in the claims to increase their intelligibility (Rule 6.2(b) PCT). This applies to both the preamble and characterising portion of all claims, independent or dependent.

3. According to the requirements of Rule 5.1(a)(ii) PCT the documents D1 and D2 should be mentioned in the description and the relevant background art disclosed therein should be indicated. The applicant should ensure that it is clear from the description which features of the subject-matter of independent claim 1 are known from the documents D1 and D2.

4. The description must be brought into conformity with the claims.

Care should be taken during revision, especially of the introductory portion including any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed, Article 34(2)(b) PCT.

* * *

CLAIMS

1. A security label comprising: a carrier film; a first layer of a non-affixing polymeric coating printed on the film, the non-affixing polymeric coating comprising a UV rotary letter press ink, and the first layer defining affixing regions providing a first pattern, said affixing regions being substantially devoid of the non-affixing polymeric coating; a second layer of an affixing material comprising a plurality of affixing pigmented polymeric coatings to provide a second pattern on the label; wherein regions of the second layer adhere to the carrier film via the affixing regions of the first layer; and the security label further comprises an adhesive to adhere the label to a support.
2. A security label according to claim 1 wherein the first layer is less adherable to the carrier than the second layer.
3. A security label according to claim 1 or 2, wherein when the substrate is removed from the carrier film, the affixing portion of the second layer remains adhered to the carrier film.
4. A security label according to any preceding claim wherein the first layer is substantially inadherable to the carrier film.
5. A security label according to any preceding claim wherein the second layer has a degree of adherability to the carrier which is greater than its degree of adherability to the support.
6. A security label according to any preceding claim wherein the carrier film comprises a plastics material.
7. A security label according to claim 6 wherein the plastics material comprises a polyester.
8. A security label according to claims 1 to 6 wherein the carrier film comprises any other suitable polymeric material, or paper.

9. A security label according to any preceding claim wherein the carrier film is formed of a light transmitting material.
- 5 10. A security label according to any preceding claim wherein the carrier film is transparent or translucent.
11. A security label according to any preceding claim wherein the carrier film has a thickness of less than 0.2mm, preferably less than 100 microns.
- 10 12. A security label according to claim 11, wherein the thickness is in the range of substantially 25 microns to substantially 50 microns.
13. A security label according to any preceding claim wherein the first 15 layer is formed of a light transmissive material.
14. A security label according to claim 13 wherein the first layer is transparent or translucent.
- 20 15. A security label according to claim 13 or 14, wherein the first layer is clear.
16. A security label according to claim 18 wherein the first layer comprises a film of a polymeric material, for example a polyester film.
- 25 17. A security label according to any preceding claim wherein the UV rotary letter press ink of the first layer comprises a short chain polymeric substance, having a three-dimensional lattice structure.
- 30 18. A security label according to any preceding claim wherein the first material comprises a polymeric coating with a short chain molecular structure.

19. A security label according to claim 20 wherein different affixing regions of the first layer have the shape of different letters, whereby words can be formed from said letters.

5 20. A security label according to any preceding claim wherein the second layer comprises a plurality of pigmented polymer coatings, to allow printed matter in a desired pattern to be applied to the first layer as the second layer.

10 21. A security label according to any preceding claim wherein the second material comprises a UV rotary letter press ink, comprising a long chain polymeric substance, having a two-dimensional structure.

15 22. A security label according to claim 21 wherein the second material comprises a pigmented polymeric coating with a long chain polymeric structure.

20 23. A security label according to any preceding claim further comprising a release layer, provided on the second layer.

25 24. A security label according to claim 23 wherein the release layer comprises a liner, including an adhesive resistant material.

25 25. A security label according to claim 24 wherein an adhesive is provided on the release layer, the adhesive being coated thereon and so that it can be transferred to the second layer.

30 26. A security label according to claim 25 wherein a sealing layer is provided between the second layer and the adhesive to prevent movement of the adhesive into the second layer.

27. A security label according to claim 23 wherein an adhesive material is applied to the second layer to provide an adhesive layer.

15

28. A security label according to claim 27 wherein the adhesive material comprises a hot melt adhesive, curable by light.

29. A security arrangement according to claim 27 or 28 wherein the 5 release layer may be provided on the adhesive layer.

30. A security label according to any of claims 27 to 29 wherein a pattern layer is provided on the second layer and the adhesive material is provided on the pattern layer.

10

31. A security label according to claim 30 wherein the pattern layer comprises a metallised material.

32. A security label according to any preceding claim further including a 15 removal layer to allow the carrier to be removed from the support, the removal layer being provided on a removal region of the second layer.

33. A security label according to claim 41 wherein the removal layer comprises a silica compound.

20

34. A security label according to any preceding claim wherein the second layer comprises a confuse pattern region to render unreadable any matter printed on the substrate.

25 35. A security label according to any preceding claim wherein an identification layer is provided for identification purposes.

36. A security label according to claim 35 wherein the identification layer includes an activatable material which defines an identification pattern.

30